

Proposed imported soil as berm backfill at Evraz Oregon Steel riverbank source control measure

Submitted October 13, 2015

The United States Environmental Protection Agency has the following comments on the imported fill based upon information received October 13, 2015 in email from Craig Heimbucher of Integral Corp via Jennifer Sutter (ODEQ) regarding chemical analyses results for a proposed import material comprising: a topsoil mix of compost from S & H Landscape Supply (part of BES stormwater mix previously tested and approved) and sandy loam from the Molalla River (referred to as Topsoil #2). We have assumed that the combined 1:4 ratio mix is referred to as Topsoil #2.

1. Additional detail is needed to verify representativeness of the topsoil sample collected to document that the sample is representative of the 2,000 to 4,000 cubic yards of “Topsoil # 2” that will be used onsite. The nature of the single “5-point composite” sample is unclear. Based on the final design, “Stockpile samples shall be collected from five points equidistant around the stockpile at a depth of 6 to 12 in. below the surface of the soil stockpile and at an approximate height of 3 ft above ground surface.” The description below states that a 5-point composite sampled was collected from “a pre-mixed topsoil sample”. EPA recommends that DEQ verify that this the composite sample was collected from soil that is representative of the 2,000 to 4,000 cubic yards of soil that will be imported to the site.
2. In addition to the exceedances of the soil import criteria for selected dioxin/furan (D/F), five non-carcinogenic PAHs butyl benzyl phthalate, benz(a)anthracene, fluoranthene, Phenanthrene and pyrene, and benzoic acid, EPA notes that Portland Harbor PRGs for remedial action objective 9 (RAO 9) were also exceeded or laboratory reporting limits exceeded RAO 9:
 - a. 2,3,7,8-Tetra CDD, 2,3,4,7,8-Penta CDF, 1,2,3,7,8-Penta CDD, 1,2,3,7,8-Hexa CDF (result or laboratory reporting limit exceeds PRG)
 - b. Dieldrin (laboratory reporting limit exceeds PRG)
 - c. Carcinogenic PAHs (laboratory reporting limit exceeds PRG)
 - d. Bis (2-thylhexyl)phthalate (laboratory reporting limit exceeds PRG)
 - e. Hexachlorobenzene (laboratory reporting limit exceeds PRG)

The most significant exceedance of the RAO 9 PRG is for the dioxin/furan 1,2,3,4,7,8-hexa CDF, where the sample result of 0.927 picograms/g exceeded the PRG of 0.002 pg/g by 460 times.

3. An evaluation of the data usability should be made, or data quality explained by the laboratory because laboratory reports indicate quality control parameters are questionable, including analyses of samples exceeding holding times for semi volatiles (SW 8270D) and pesticides by method SW 8081B.